

## ***Chapter 2***

# **Description of Proposed Action and Alternatives**

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### 2.1 Introduction

No substantive comments were received that specifically address this section.

### 2.2 Description of the Proposed Action

#### 2.2.1 Scale of Operation

##### *Duration of Mining*

**Comment I-2.010**

What is the likely hood that this little project could ... take the major part of the lifetime of a child growing up?  
Rose Clark

**Response**

The Applicant proposes to mine as much as possible from the site, consistent with environmental, technical, and economic considerations (including slope stability and groundwater protection measures). If approved, the mine would probably be in operation over several decades.

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**Comment C-12.005**

The average annual production and life of the mine are confusing. Life of the operation is assessed at a greater time span (35 years) than the estimated life of the mine at maximum extraction levels (11 years). In addition, the annual tonnage extracted for island use is expected to grow at 2.5%--what is the island's economic growth rate and are these figures compatible?  
St. George, Brian

**Response**

While mining at maximum rates could result in the mine being completed in as little as 11 years, such a case is not likely. As has been historically the case at this site, mining occurs sporadically, with periods of high production followed by relatively inactive

periods. This is because the market for structural fills is influenced by large projects.

For example, annual production at the site was as high as 1.3 million cubic yards during the 1970s, when the Port of Seattle underwent major improvements. The Maury Island site was well suited to provide structural fills for those port projects.

The proposed Port of Seattle third runway project is a current example of how even a single project could influence mining levels and the duration of mining at the site. That project would require a tremendous amount of fill and, should the Maury Island site be used as a source for that fill, the site could operate at the proposed annual production level of 7.5 million tons (5.5 million cubic yards) for 3 years or more.

Once such a project were completed, several years could pass before a similar level of production was needed for a large project or several large projects.

While the exact market cannot be predicted, it is unlikely that the market could sustain the 7.5-million ton production level and, therefore, the site is estimated to be in production over several decades.

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**Comment**

The scale and duration of the proposed action is immense and inappropriate for a rural island location in Puget Sound. A 750-fold increase in resource extraction working 24 hours per day, 7 days per week is an abomination on a rural residential island. In Section 2.2.1, paragraph 5, the DEIS states that constant operations are necessary for Lonestar to compete for contracts and that the level of daily output would only be at peak while fulfilling contracts. We all know that the target contract is the proposed third runway at SeaTac airport, which will require so much gravel that extraction would not occur in less than a year. Therefore, the truth is that maximum output, with noise and lighting will occur for extended periods, perhaps more than a year, more than years. The DEIS even submits that maximum daily output would deliver 7.5 million tons of gravel in only half a year. Would the applicant be allowed to mine more than 7.5 million tons per year?

Matthew Boyle

**Response**

The rural environment includes commercial farming, forestry, mining, and cottage industries. See chapter three of the King County Comprehensive Plan, Policy R-101, available on King

County's web page at:  
[http://www.metrokc.gov/exec/orpp/compplan/1994\\_98](http://www.metrokc.gov/exec/orpp/compplan/1994_98).

The proposed action would be limited to no more than 7.5 million tons (5.5 million cubic yards) excavated per year.

The Applicant wishes to be able to load barges at any time (24 hours a day, 7 days a week). However, this does *not* mean that barges would, or could, be loaded all the time.

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**Comment G-5.006**

6 The proposed barging rates are misleading. The EIS is meant to cover four barges a day, every day over three years to support the construction of the proposed third runway—spreading the mining duration across 35 years is intended to disguise the true intent of this proposal.

Citizens Against SeaTac Expansion

**Comment C-7.005**

The DEIS is misleading regarding barge rates, and can be easily underestimated by readers. Although this EIS is meant to cover four barges a day, every day for three years to support the Third Runway, this information is not readily apparent. Spreading the mining duration across 35 years tends to disguise the huge amount to be accomplished in the first few years.

Brown, A.

**Response**

The length of mining cannot be predicted with certainty. This is the nature of the project. As stated above, it is unlikely that the site would be mined out in 11 years, but would continue due to periods when production is below maximum levels.

The comment that the EIS discounts or misrepresents the situation is noted. The EIS discloses impacts at full production levels to disclose the peak impacts that could occur at any one time. At the same time, the EIS considers that the site would be in operation for several decades. By looking at both peak and long-term impacts, the EIS meets the requirement to inform the decision-maker and the public of significant impacts and alternatives, including measures that could achieve the project's objectives but at a lower environmental cost.

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**Comment**

Paragraph 7 in Section 2.2.1 states that barge loading will more likely occur at night. What best management practices can be implemented to eliminate the impacts of noise and artificial light

on the local residents, and the nearshore marine environment?  
Matthew Boyle

**Response**

DDES will definitely consider shielding for light standards, among other measures, to minimize light and glare. This is true for both aesthetic reasons, as referred to in this comment, as well as concerns for fish and other marine organisms. Essentially any change in light in the marine environment, either more or less, is considered adverse by most agency biologists, although effects can be both positive and negative.

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***Amount of Materials to be Mined***

**Comment O-1.089**

... what is the estimated tonnage and cubic yards of sand and the tonnage and cubic yards of gravel that would be exported from this site under this proposal?  
Ortman, David

**Response**

The Applicant has estimated that the site contains approximately 80 million tons (58.6 million cubic yards) of mineable material.

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**Comment O-1.090**

What is the estimated tonnage and cubic yards of sand and the tonnage and cubic yards of gravel that would be taken from this site but used on Maury/Vashon Island under this proposal?  
Ortman, David

**Response**

The site could provide the Maury/Vashon Island market somewhere in the range of 1 million tons (0.7 million cubic yards) over the life of the mine, with an average annual production of around 15 to 25 thousand tons (11 to 18.4 thousand cubic yards). The exact amount cannot be predicted, but the local market is too small to support large-scale mining. The majority of materials would be barged to off-site locations.

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**Comment I-2.001**

... the annual 10,000 cubic yards of material ... quadruple to 40,000 cubic yards of material daily for 3 years strains the imagination. ... The incomprehensible is compounded by removing topsoil that is arsenic contaminated at levels as high as 338 ppm at one test site.  
Rose Clark

**Comment I-2.007** The mining operation will take out in one day four times what was historically taken in one year.  
Rose Clark

**Comment I-3.008** DEIS does not adequately address: the loss of one-fifth of Maury Island's land mass.  
Judith Wood Pearce

**Comment** ... they seek to remove 10% of Maury Island's above-water land mass. How can this proposal be squared with WAC 173-16-040(5)?  
Scott J. Engelhard

**Comment** It appears that the proposed increase in scope of the mining operation is totally out of scale with whatever was intended with the initial permit. Going from mining 10,000 yards of gravel per year to a proposed 20,000 yards of gravel per day is just unrealistic. The impact both in land use, noise and dust is much beyond what anyone would have ever considered reasonable, especially in light of the fact that two rather densely populated communities abut the property on two sides.  
Jonathan Parrott

**Response** Mining would change the site topography, but would not reduce the size of Maury Island.

The Applicant is proposing to greatly increase maximum mining levels to approximately six times historic levels. The EIS identifies the environmental impacts of this level of mining. Since the site is essentially idle, the proposal is, of course, much greater than what is currently taking place. The site has been designated as a mineral resource site in both zoning and in the comprehensive plan.

The EIS (Chapter 10) addresses control of arsenic.

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**Comment** 2.14.5 Is 40,000 tons per day a magic number? Will no other smaller number suffice? Is this an economic or logistical limitation?  
J. Michael Kuperberg, Ph.D.

**Response** The ability to produce up to 40,000 tons (about 29,000 cubic yards) per day is the Applicant's stated objective.

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**Comment O-1.073**

2.2.3.4. p. 2-5 It states that gravel would be stockpiled until about 40,000 or 50,000 tons have been collected which would take about 3 to 4 years to accumulate. Is it correct that the total amount of gravel remaining at the site is approximately 120,000-150,000 tons?

Ortman, David

**Response**

This level of detail is not necessary to identify the impacts of the proposed action or to develop mitigation measures. The site contains mostly sand, but also some gravel.

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**Comment O-1.072**

p. 2-4. It states that only a few product specifications would be produced at the site. Please identify what product specifications would be produced at the site.

Ortman, David

**Response**

The Applicant has indicated that the site would provide structural fill. Exact specifications are not relevant to the decision at hand.

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**Comment O-1.056**

Why are large gravel contracts mentioned when gravel appears to be a minor portion of the site and it states on this page that “when demand for sand is low, the level of operation at the site would also be low. It is even likely that the site would be idle for periods of time, again depending on the market.”?

Ortman, David

**Response**

This statement should have referred to sand and gravel. The material to be mined is mostly sand with some gravel. In some cases, the material would be shipped as mined. In other cases, gravel would be screened out. The FEIS has been revised to reduce possible confusion between the materials that would be mined. In any case, materials would be mined and barged from the site, and this is the major action that needs to be considered. Detailed product specifications, proportions, and the like would only be relevant if the specifications and proportions influenced significant impacts. This is not the case.

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**Comment O-1.063**

2.2.1. p. 2-2. Again, the description of what the mine site would produce remains vague. It states that the site provides a relatively uniform product: “sand and structural fills”. Please clarify in this

section the difference between “sand” and “structural fills.”  
Ortman, David

**Response**

Structural fills are those used to construct stable surfaces on which to build. Sand, due to its ease in grading and compacting and its stability over time, makes a good structural fill. While there are specific definitions of sand, gravel, cobble, rock, and various other mining specifications, the distinction between sand, sand and gravel, and structural fills is not relevant to the environmental impacts nor the decision to be made. The site contains a mixture of sand and gravel and some till. The materials that would be mined would be used for structural fill. Evaluating the different materials would not provide meaningful information related to the proposal and its impacts.

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**Comment**

2.3.1 The applicants’ discussed theoretical versus practical maximum extraction rates may also provide an area for compromise. The permit could consider limiting annual extraction, or number of days of operation over a given time.  
J. Michael Kuperberg, Ph.D.

**Comment**

2.3.2 It seems unlikely that projects requiring multiple days of 30,000 tons of sand per day would restrict themselves to morning deliveries. If this is the case, this restriction could be written into the permit.  
J. Michael Kuperberg, Ph.D.

**Response**

Restrictions in hours and days of operation are considered as part of Alternatives 1 and 2. The Applicant does not propose to restrict barging to morning deliveries, but rather has informed King County that that was the most common time of delivery. A restriction to limit the Applicant to only morning deliveries does not seem to respond to any particular impact, nor be based on formally designated policy or regulation, and, therefore, is not warranted under King County’s substantive authority under SEPA (WAC 197-11-660).



## **2.2.2 Clearing and Ground Preparation**

### ***Site Buffer***

***Comment O-1.153***

(repeated in Ch. 3) It states that a 50-foot-wide vegetated buffer would be maintained around the site. How does a vegetated buffer help with a dust control plan when there is no information given concerning the height or density of the vegetated buffer? Please provide quantifiable information concerning the 50-foot buffer.

Ortman, David

***Comment O-1.068***

p. 2-4. It states that along the edge of the mining pit a 50-foot wide naturally vegetated buffer would be retained around the perimeter of the site. How will sloughing of the buffer be prevented?

Ortman, David

***Response***

Because of the presence of madrone and the importance of a vegetative buffer for screening and dust control, King County will consider a requirement to prohibit clearing of trees within the buffer (Section 5.4.3.2 of the FEIS). Specific heights, densities, and other quantifiable information could also be required if appropriate under King County's SEPA substantive authority (WAC 197-11-660).

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***Comment I-17.002***

It is claimed that a 200 foot vegetated buffer will be maintained along shoreline ... this buffer has already been disturbed with excavation, road grading ... there is no indication that ... this disturbance ... will stop or be repaired.

Joshua Putnam

***Response***

The FEIS includes restoration of the buffer as a potential mitigation measure to protect and enhance the shoreline and marine environment. See Chapter 6 of the FEIS.

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***Comment C-8.021***

What will the applicant do with grading behind the 200-foot buffer? How will the reverse slope of the buffer be developed to avoid erosion and limit damage to existing vegetation? What buffer currently exists and is it acceptable or will it be modified?

Vashon-Maury Island Community Council

***Response***

These are design issues to be addressed as part of reclamation. At this point, it is sufficient to know that slope control is technically

and economically feasible and is, in fact, required under the state Surface Mining Act. King County Code (KCC) Section 16.82.100 gives several operational conditions and standards of performance that address concerns regarding slope stability.

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**Comment G-3.006**

(repeated in Section 6.4.2) 6. Section 2 2.2. The clearing and ground preparation proposal offers to retain a 200-foot vegetated buffer along the marine shoreline. The failure of the DEIS to explain to the public that this is the minimum requirement of the Shoreline Management Act would appear a flagrant attempt on the part of King County to make the applicant appear generous. Nobody yet knows how shoreline buffers will change in response to the ESA listing of chinook salmon—so it would seem prudent for King County to reserve a wider buffer until the chinook 4(d) rule is issued. It is not clear if a 200-foot buffer on this site is adequate to protect the vegetation that is currently supplying prey resources for chinook salmon.

People for Puget Sound

**Response**

In response to this comment, the FEIS has been revised to indicate that the 200-foot buffer is a requirement of the Shoreline Management Act.

King County shares with the People of Puget Sound a strong commitment to protect and enhance the marine environment, including habitat for salmon. As stated above, the EIS describes additional shoreline protection measures for consideration (Section 6.4). The EIS team spent considerable effort to identify specific adverse impacts and to inform the decision-maker and the public of measures that would avoid or minimize adverse impacts on the marine environment.

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**Comment**

What is the basis for the 200 foot buffer (or the 50 foot buffer)? By definition, the buffer will be impacted by site activities. If there were to be no impact, there would be no need for a buffer. Thus, does the “buffer” count as “open space and upland habitat” or as part of the system to contain site impacts. As stated, this seems to be double counting.

J. Michael Kuperberg, Ph.D.

**Response**

The requirements of the King County Shoreline Master Program apply to uses and activities within the 200-foot shoreline management zone, which is measured from the ordinary high water

mark to 200 feet upland for all lands within shoreline jurisdiction. The conveyor system and dock are current nonconforming uses under the King County Shoreline Master Program that can remain but cannot be made more non-conforming.

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### ***Phasing***

***Comment O-1.065***

Regarding Clearing and Ground Preparation: It states under the Proposed Action and Alternatives 1 and 2 that up to 64 acres of land being mined or actively reclaimed at any one time. What is the definition of “actively reclaimed”?

Ortman, David

***Response***

“Actively reclaimed” refers to areas where the operator is establishing final or interim grades and vegetation, including planting and cultivating vegetation.

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***Comment O-1.065***

This statement seems to imply that only 64 acres of land will be impacted at any one time. Is it correct that reclamation of mined areas would take decades and that “active reclamation” is actually an ongoing process that might include replanting and other reclamation over a long time period? Please change this statement to read: “Up to 64 acres of land will be subject to mining or immediate reclamation activities. Mined out areas will be subject to an ongoing reclamation process.”

Ortman, David

***Response***

This suggestion has been incorporated into Section 5.3.3.1 of the FEIS (under Habitat Loss) to address the impact of multiple mine phases simultaneously undergoing reclamation. In addition, Section 2.2.9 includes a new statement that reclamation involves gradual development of vegetation.

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***Comment O-1.066***

2.2.2. p. 2-3. This section states that no more than two phases, or 64 acres of mining/reclamation activities, would be in process at any one time. This does not appear to be correct. Given the extremely long timeframes involved in reclamation (“Removal of forest would delay the eventual development of habitat for cavity-nesting birds by about 50 years.” (Table S-4) please revise this section to include the following: While mining would occur on parcels of 32 acres at a time, essentially all past mined areas would

be undergoing a lengthy reclamation process. Under the proposed project, the site deposits could be mined out in 11 years leaving the entire site in an altered state of little value to some wildlife species for many decades.

Ortman, David

**Response**

It is not likely that the site would be mined out in 11 years, since the market, while unpredictable, is nonetheless unlikely to support such production rates (based on historical patterns). Still, additional information has been added to Section 5.3.3.1 to clarify that mining at a faster rate would necessarily result in more areas in the early stages of reclamation, and a reduction in areas of mature forest.

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## **2.2.3 Facilities and Equipment**

**Comment**

2.5.6 Since watering will be a regular activity, and since site equipment will require regular refueling and lubrication, the statement that these trucks “may occasionally be present onsite” seems unnecessarily vague. See, for comparison, page 3.9.

J. Michael Kuperberg, Ph.D.

**Response**

The term “occasionally” has been eliminated from the discussion in the FEIS.

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### **2.2.3.1 Structures**

**Comment I-7.006**

Will the “small” on site structures have pumped toilets or will a septic system be built?

Michael Meyer

**Response**

As stated in Section 2.2.3.1 of the DEIS, the Applicant proposes to use portable, self-contained toilets.

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### **2.2.3.2 Access and Roads**

**Comment**

2.5.3 Elsewhere in the document it is proposed that the access roads to paved to reduce dust and contaminated soil transport. While this seems like a reasonable approach, it is not reflected in this section.

J. Michael Kuperberg, Ph.D.

**Comment C-8.022**

(repeated in Sections 3.4.2, 4.3.1, and 10.3.4). Access roads to the site should be paved to prevent dust. Will a washing system for trucks be required, and if so, what requirements will the system have? Where will water be obtained? How will leachate be handled? Provide specifications for the wash down system and discuss monitoring of toxics. Will a monitoring well be placed near the wash down system, and how frequently will monitoring occur? Will the water requirements of this system involve truck traffic? If so, reflect this additional issue.

Vashon-Maury Island Community Council

**Response**

This mitigation measure has been removed, since no specific adverse environmental impact was identified and, therefore, the measures were not reasonable (per WAC 197-11-660). As part of the response to comments, the EIS team evaluated the reasonableness of all mitigation, including additional measures developed in response to public comment, using the guidance provided in WAC 197-11-660. This measure was determined to be unnecessary since fewer than 20 trucks would leave and/or enter the site each day, as proposed. In the near term, a maximum of 5 trucks is expected each day.

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**2.2.3.3 Heavy Equipment**

**Comment**

2.12.2 The list of heavy equipment on page 2.5 does not include “excavator or grader” as listed here [p. 2-13]. Which list is correct?

J. Michael Kuperberg, Ph.D.

**Comment**

Section 2.2.3.3, paragraph 1, mentions the heavy equipment that will be used for excavation. Will this equipment be fueled and tended on-site, while excavating close to the aquifer?

Matthew Boyle

**Response**

This equipment has been added to Section 2.2.3.3 of the FEIS. As noted in Section 2.2.3.3, fuel trucks would be present onsite. Impacts and mitigation for fueling activities are discussed in Chapter 4 (Sections 4.3.2.1, 4.4.3.7, and 4.4.3.8).

#### **2.2.3.4 Processing Equipment**

**Comment O-1.074**

What is the purpose of the crushing plant? Is there no market for gravel, as is, from the site?

Ortman, David

**Response**

The purpose of the crushing plant is to efficiently utilize larger sized materials that may need to be removed from some shipments. In most cases product would be shipped unprocessed, but in limited cases, product would need to be screened to meet the structural needs of a particular project.

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**Comment O-1.154**

3.4.1.3. p 3-10. Does Taiheijo Cement Corp. plan on operating the portable crushing plant at a capacity greater than 150 tons per hour?

Ortman, David

**Response**

A typical plant can crush about 300 tons (220 cubic yards) an hour. As identified in the EIS (DEIS Section 3.4.1.3), the project would be subject to federal New Source Performance Standards (40 CFR 60), if it were to operate at a capacity greater than 150 tons (110 cubic yards) per hour.

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#### **2.2.3.5 Conveyor and Dock Loading System**

##### **Conveyer System**

**Comment**

The Times editorial [September 20, 1999], again we assume based on the proponent's view as we were not contacted, mentioned a covered conveyor. Please note this mitigation was not discussed in the DEIS and, therefore, as the engineering for the covered conveyor is new information not included in the DEIS, we would appreciate Jones and Stokes providing a revised and/or new DEIS covering this information. We ask for a 60 day comment period for the new and/or revised DEIS. I believe the proponent and Jones and Stokes were to submit mitigation available and/or suggested and, as this was not submitted or discussed until today's regional paper, the DEIS failed to discuss this critical issue. ... What information has King County received regarding the proponent's offer of mitigation including a covered conveyor, which apparently the Times has knowledge of, and which was not included in the draft EIS?

Sharon K. Nelson

**Response**

A new DEIS is not required for additional mitigation measures. In fact, developing new mitigation measures for the FEIS is one of the major ways a lead agency can respond to comments on a DEIS.

Seattle Times articles are not part of the SEPA record and, therefore, are not subject to public comment and King County response. Questions about sources outside of King County should be directed to that source.

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**Comment O-1.075**

p. 2-6 This section, and figures 6-1 and 6-2, do not provide a clear description of the conveyor/dock loading system. Please provide a detailed drawing of the conveyor/dock loading system.

Ortman, David

**Comment C-4.017**

(repeated in 6.3.2) The DEIS does not provide an engineering design or a conveyor belt system that would prevent spillage into the near-shore area. Evidence demonstrates that conveyor belt systems have spillage at the loading hopper, along the belt and at the discharge point. There is no quantification of potential spillage nor an analysis of how spilled material would be affected by currents and tidal action. What are the limits of weather in which the conveyor can be safely operated and a barge loaded without spillage?

Vashon-Maury Island Community Council/Thomas McKey

**Comment I-3.011**

... DEIS has omitted many issues ... has inaccuracies ... the amount of gravel spillage in the loading and unloading process is completely dismissed.

Judith Wood Pearce

**Comment C-8.023**

Please provide a copy of the design for the spill tray, collection trays, conveyors, and loading facility for the Maury Island operation, along with a discussion of spillage, impacts to the nearshore environment. Include a discussion of littoral drift, tides, and weather conditions and how they will impact spillage/accidents from the system.

Vashon-Maury Island Community Council

**Response**

It is premature to require engineering designs. Per WAC 197-11-055 Timing of the SEPA process:

*If an agency's only action is a decision on a building permit or other license that requires detailed project plans and specifications, agencies shall provide applicants with the opportunity for environmental review under SEPA prior to*

*requiring applicants to submit such detailed project plans and specifications.*

*The SEPA process shall be integrated with agency activities at the earliest possible time to ensure that planning and decisions reflect environmental values, to avoid delays later in the process, and to seek to resolve potential problems.*

*In general, agencies should adopt procedures for environmental review and for preparation of EISs on private proposals at the conceptual stage rather than the final detailed design stage.*

Additional information on impacts and potential mitigation measures related to spilling and littoral drift has been included in the FEIS, including consideration of weather-related operating restrictions.

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**Comment I-2.015**

How is the excavated material to be carried to the dock? By truck?  
Twenty four hours a day?  
Rose Clark

**Response**

Excavated material would be carried to the dock via a conveyor system, as described in Section 2.2.3.5 of the EIS.

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**Comment**

2.6.1 It should be clarified that the conveyer system is not going to be “constructed”, but rather renovated.  
J. Michael Kuperberg, Ph.D.

**Response**

The conveyor system is moved about the site to follow mining activity, so much of the system would be constructed and not merely renovated.

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**Splash Pan**

**Comment O-1.076**

Please provide a detailed drawing of the “splash pan”? What capacity is it designed to hold? What is a “troughing idler”? What is a “return idler”?  
Ortman, David

**Response**

As described above, detailed plans and designs are not required nor even appropriate at the EIS phase of SEPA review. *Idlers* are the mechanisms that control the movement of the conveyor belt.



**Comment G-2.007**

7. 2.2.3.5. A spill pan will be fitted at the end of the dock to prevent sand from spilling into Puget Sound. What is the depth of the pan? How is the sand to be removed once it falls onto the pan? What is the expected amount of spillage to occur? If spillage occurs into Puget Sound what steps are going to be taken to remove the sand? At Cherry Point, the Pacific International Terminal conveyor will be fully enclosed to prevent spillage of product onto the beach and into the water. We understand the conveyor at the Lone Star facility in DuPont is also fully enclosed. We believe an enclosed conveyor is a Best Management Practice and is required by the Shoreline Management Act and the Clean Water Act. Review of the DEIS suggests that prior operation of the facility led to substantial loss of product into the water. The EIS should compare the likely environmental impacts of not enclosing the conveyor and justify the decision not to require an enclosed conveyor.

Washington Environmental Council

**Response**

Additional considerations to prevent spilling, including wind screens, have been included in the FEIS for the consideration of the decision-maker. Specifications of the spill tray are design issues and would be required prior to approval of the grading permit. What is important under SEPA is that a spill pan can be used to mitigate spilling. Some spilling is unavoidable, but the impact is far from devastating in that the material that is dropped is sand and gravel, which is what the bottom is composed of at the site. The impact could include some burying of algae, clams, and other benthic organisms directly below the loading area. These plants and animals have developed on previously spilled materials in this area and would likely recolonize the area following closure of the mine.

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**Comment I-7.010**

... can we assume that the applicant, Jones and Stokes, and King County guarantee that this device (spill pan) will eliminate spillage?

Michael Meyer

**Response**

Some spill is inevitable, but could be minimized through reasonable mitigation measures, as described in the FEIS. The magnitude of this impact needs to be considered in light of the fact that spilling would be limited to the area below the loading point, and that this area has already received spillage from past operations. The main concern is the potential burying of eelgrass or other sensitive nearshore habitats. These habitats do not occur at the loading point.

In addition, sand is a natural product and, with the exception of the harm to eelgrass just mentioned, is not particularly harmful to the environment and may even be beneficial. Sand is, after all, what composes the majority of sediments in the area. In fact, one of the major concerns with shoreline protection in Puget Sound is the loss of sand and other materials that comes from bulkheading and armoring.

This is not to discount the adverse affect of major spilling, but rather to place in context the small but inevitable amount of spilling that would occur.

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### **2.2.3.6 Dock Repairs**

NOTE: Please see Chapter 6 for more information regarding dock repairs.

#### **Comment**

Section 2.2.3.5, -second bullet mentions the re-installment of rollers and idlers. This is misleading, the rollers and idlers are would need to be installed, and there are not 225 existing idlers. Keep in mind this is not pier maintenance, it is new construction.

Matthew Boyle

#### **Response**

The re-installation of rollers and idlers is what the Applicant is proposing and, should the proposed action be approved, then this is what would be permitted. King County cannot evaluate every detail of the Applicant's proposal for technical feasibility, but rather must consider the overall environmental consequences of the proposal. While some minor modifications of the project could occur (such as replacing 223 bolts instead of 222), any major modification of the proposal from what the Applicant presented to King County would be subject to SEPA review.

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### **Extent of Necessary Repairs**

#### **Comment A-2.006**

(repeated). According to the DEIS, work on the pier would require replacement only, with no additional pilings needed except for the one new dolphin (10 pilings). During the site visit appeared that the end of the pier (at the "T") had virtually no bracing. The few existing timber-bracing piles were rotted and nonfunctional. Given that the most common barge size would have a 10,000-ton capacity, it would seem that significant amounts of timber bracing would need to be added in order to maintain the integrity of the

pier during storm events when the barge would be jarring against the pier. The WDFW questions the accuracy of the statement that only replacement piling shall be required for dock repairs.

Washington Department of Fish and Wildlife

**Comment I-3.010**

... DEIS has omitted many issues ... has inaccuracies ... the amount of restoration necessary to make the loading dock operative is not accurate.

Judith Wood Pearce

**Comment G-5.005**

5. Actual repair estimates of the equipment and pier should be obtained to determine the actual and true scope of the purported maintenance.

Citizens Against SeaTac Expansion

**Comment C-7.004**

Actual repair estimates of the equipment and pier should be obtained to determine the true scope and magnitude of the needed maintenance.

Brown, A.

**Comment I-15.008**

(repeated) Condition of the dock: unsafe and needs replacement (which requires additional impact statements, shoreline studies, permits, etc.).

Beverly Skeffington

**Comment I-17.003**

The claim that only 25% of decking and supporting timbers need to be replaced should be independently evaluated—this claim is hard to believe after seeing the extent of damage to the dock.

Joshua Putnam

**Comment G-3.007**

7. Section 2.2.3.6. The proposal for dock repairs is exceedingly and unnecessarily confusing. The dock repair will require 30 new pilings, ten fender pilings require fresh-heading, one ten-piling dolphin needs complete replacement, and each of the remaining 9 dolphins will require the addition of two to three pilings (27 possible). This appears to add up to 67 new pilings and 10 fresh-headed pilings. These totals are not presented, and thus the total impact is obfuscated.

People for Puget Sound

**Comment O-1.078**

Please provide a detailed drawing showing the dock pilings, the fender pilings and the dolphins and which pilings need to be replaced.

Ortman, David

**Comment C-1.003**

... in addition to an engineering review of the dock and core sampling of the pilings (see also 2.2.3).

Nelson, Sharon

**Comment O-1.287**

6.3.7.1 p. 6-13 and 6.3.8.1 p. 6-16 These section states that pile driving would create noise and vibrations underwater and that installation of approximately 30 new dock pilings and “fresh heading” 10 existing pilings would take place. However, in Sec. 9.3.1.1 on p. 9-15 it appears that far more pilings would be involved. Please clarify why Jones & Stokes has listed 30-40 pilings as needing replacement or repair on page 6-16 and 60-70 pilings on page 9-15.

Ortman, David

**Response**

In response to public and agency comments, King County commissioned an independent evaluation of the existing dock to evaluate needed repairs and long-term maintenance requirements, and to identify and describe reasonable alternatives. These alternatives include replacing the dock to avoid repeated maintenance impacts, to eliminate creosote pilings in the area, and to more easily incorporate the latest designs used to protect the marine environment. The independent dock evaluation is included as Appendix F in the FEIS. In addition, the Vashon-Maury Island Community Council commissioned their own study of the dock, and the report is included as Appendix H of the FEIS.

Section 2.2.3.6 of the FEIS contains a modified description of necessary repairs to the dock. In addition, new potential mitigation measures have been included in the FEIS. Additional analysis is also included in Section 6.3.8.

The new dock assessment addresses the following questions:

- Approximately how many pilings would need to be replaced on the dock, fenders, and dolphins to make the dock capable of operating as proposed by the Applicant?
- Assuming relatively constant use, approximately how often would repairs need to be conducted and what would be the extent of those repairs?
- Over the long run, would replacement of the existing dock with a new, low-maintenance dock require less in-water work than repair and maintenance of the existing dock?

Detailed drawings were not included because King County decided that verbal descriptions were sufficient to inform the decision-maker and the public of adverse impacts and reasonable alternatives to avoid or minimize specific impacts. Drawings may be required for other permits that the Applicant will need before King County can issue a grading permit. They are not required for

the SEPA analysis, since the analysis needs to consider the proposal at a level necessary to determine significant impacts, and to identify mitigation measures.

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### **Piling Removal and Replacement**

**Comment**

Section 2.2.3.6, addresses pile-driving. Installation of the derrick-barge will greatly disturb bottom sediments. Anchoring the barge will have operational impact, but installation and removal will cause a high degree of sediment disturbance from propwash and anchor positioning. Where is this addressed?

Matthew Boyle

**Response**

This issue is addressed in Sections 6.3.8 and 6.4 of the FEIS.

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**Comment O-1.079**

It states that some pilings would be “fresh-headed” by pulling the piling up about 3 to 5 feet and then cutting away damaged or rotting wood. Would this be done to any of the dock pilings or only the fender pilings?? Doesn’t this reduce the structural strength of the pilings?

Ortman, David

**Comment A-2.004**

2.2.3.6 Page 2-7 of the DEIS states that approximately 30 pilings will need to be replaced on the existing pier. In addition, approximately 10 fender pilings at the dock would require repairs. The fender piles would be repaired by “fresh-heading”, which involves pulling the piling up approximately three to five feet to cut away the damaged wood. This may not be an acceptable method, depending on the age of the piling. The creosote in treated pilings typically leaches down through the wood so that below the mudline the piling often has a fresh coat of creosote. During a site visit on September 6, 1999, wet creosote was observed approximately 5-10 feet along the surface of several pilings. It is uncertain if this was due to natural leaching or if creosote was added for repairs. Contractors who have removed pilings have reported that the creosote often puddles at the base of the piling. Pulling the piling up through the water column could re-contaminate the surrounding waters. Given the prevalence of forage fish and other juvenile marine fishes observed in the vicinity pier, WDFW will require best management and construction practices for pier repairs, i.e., the use of steel or concrete.

Washington Department of Fish and Wildlife

**Response**

In response to public and agency comment, a new mitigation measure has been included to prohibit fresh heading to avoid this impact. FEIS Section 6.3.8 contains a revised analysis of piling replacement, and Sections 6.4.3.1 – 6.4.3.4 describe optional mitigation measures for King County to consider. These options include (1) complete replacement of the existing dock; or (2) measures to reduce impacts of renovation, such as requiring old pilings to be removed by “vibratory extraction” to minimize sediment resuspension; replacement of wooden pilings with pilings made from materials recommended by WDFW; and use of non-contaminating materials for other repairs. Chapter 6 of the FEIS describes the specific adverse environmental impact and the regulatory basis for these measures.

---

**Comment A-1.004**

Section 2.2.3.6 p. 2-8 DNR will require removal of the existing piling in a manner resulting in total extraction of treated wood and minimize resuspension of sediments. The replacement piling for state-owned aquatic lands must be a non-contaminating material. Materials used in repair of the dock decking, stringers, and supporting timbers, must be a non-contaminating material. Project proponents must consult with DNR staff for maintenance and repair of improvements on state-owned aquatic lands.

Washington Department of Natural Resources

**Comment A-1.021**

Cutting the piling at the sediment surface will not be acceptable for those piling on state-owned aquatic lands.

Washington Department of Natural Resources

**Response**

These features have been included as potential mitigation measures in Chapter 6 of the FEIS, per the comments and subsequent discussions with the WDNR. It is important to realize that WDNR is operating under a different authority than is King County. Therefore, WDNR requirements may differ from those that King County has authority to require under SEPA (WAC 197-11-660). However, since WDNR approvals must be made on the proposal before King County will issue a grading permit (per KCC 16.82.060 [D3]), the WDNR can require whatever is within its authority.

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**Comment I-17.005**

What alternatives to the use of creosote piling have been considered here?

Joshua Putnam

**Response** Steel and/or concrete pilings are the most common alternatives to creosote piling. Creosote piling is no longer used and is not allowed under current regulations.

---

### **Timing of Construction**

**Comment O-1.080** It states that the necessary repairs could take from 2 to 4 weeks. During what time of year would these repairs take place?  
Ortman, David

**Response** Construction would be timed as directed by the WDFW, which maintains authority and expertise over Hydraulic Permit Approval. Based on construction avoidance windows selected to protect salmon migration and herring, surf smelt, and sand lance spawning, construction would likely take place in the fall.

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### **2.2.3.7 Signs and Lighting**

**Comment I-17.006** What signs or other warnings can be installed to warn the public against recreational use of navigable waters around the dock?  
Joshua Putnam

**Response** Warning signs would be placed around the dock, as described in Section 2.2.3.7. Specific plans would be defined at the design stage and are not necessary at the EIS stage of project review.

---

### **2.2.4 Progression of Mining**

**Comment** Figure 2.1 It appears that mining and stripping operations would work in opposite directions. Is this correct? Why?  
J. Michael Kuperberg, Ph.D.

**Response** This is not correct. Mining would occur in phases.

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## 2.2.5 Containment Procedures for Contaminated Soils

NOTE: See also responses to comments for Chapter 10, which contains the majority of responses to comments regarding containment of contaminated soils and Chapter 4, which address groundwater issues.

**Comment**

Section 2.2.2, paragraph 3 addresses arsenic contamination of on-site soils. This is more thoroughly discussed in Section 2.2.5, but without explaining the contamination levels or protocols used to determine whether soils are contaminated. Excavation monitoring and soil testing is not addressed. Any contamination, regardless of concentration, that remains on the disturbed site would imperil the aquifer with liability for compensation and cleanup falling on the County DDES.

Matthew Boyle

**Comment I-7.014**

What sampling method will be used to segregate soil?

Michael Meyer

**Comment I-7.015**

(repeated) Without the sampling plan (for contaminated soils to be segregated) be presented, how can we be sure that all of the arsenic-contaminated soil is contained?

Michael Meyer

**Comment I-7.016**

Will the community have the opportunity to review the sampling plan?

Michael Meyer

**Comment I-7.019**

Water collection, treatment, and testing is not trivial, and must be specified in advance and reviewed by the community. It is not appropriate to dismiss this subject in the EIS with one sentence.

Michael Meyer

**Comment I-7.039**

What about dirt generated during clearing activities ? How will this dirt be segregated and contained?

Michael Meyer

**Response**

The final sampling plan will be part of a Cleanup Action Plan, to be reviewed and approved by King County and the Department of Ecology. Additional information on the Cleanup Action Plan and the monitoring plan are included in Responses to Comments, Chapter 10, and in the FEIS Chapter 10.

Sampling and analysis would be designed in accordance with WAC 173-340-820 and WAC 173-340-830, respectively, and



following the guidance contained in Ecology's publication, Guidance on Sampling and Data Analysis Methods. The final sampling and analysis plan would be part of the Cleanup Action Plan to be approved by King County.

For purposes of evaluating likely significant adverse impacts, it suffices to know that sampling can be used to identify contaminated soils, and that collection of leachate from containment cells is a straightforward issue. The technology is refined and relatively standardized. King County does not plan to have community review and comment for all plans and procedures at the site but would work with the community to maintain open channels of communication. The Applicant may also voluntarily work with the community. Such discussions could take place should the permit be approved.

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- Comment I-9.003** ... containment procedure ... fails to address the potential releases that occur during initial removal, long term maintenance and monitoring of the containment cell.  
Cyndy Mackey
- Comment O-1.082** It states that a geosynthetic clay liner (GCL) would be used for the bottom and cover. What is the thickness of the GCL bottom and cover layers?  
Ortman, David
- Comment O-1.395** p. 10-10 How thick will the bottom geosynthetic clay liner be?  
Ortman, David
- Comment O-1.396** How thick will the cover geosynthetic clay liner be?  
Ortman, David
- Comment O-1.397** p. 10-11 It states that the surface would be vegetated. Since there is only a two foot layer of sand/soil over the contaminated material, what will be done to keep both burrowing animals and plants from compromising the clay liner and allowing contaminated material to either be brought to the surface or to be taken up into leaves by vegetation on top of the site?  
Ortman, David
- Comment C-8.090** (part 1 of 3) 10 4 2 #90 Please provide additional discussion of how contaminated soils will be moved to the containment structure. Discussions merely state that "soils should be transported by covered truck, rather than by conveyor or open-bed truck." What routes will be used? Will county roads be utilized

and if so, what testing protocols will follow to ensure arsenic is not deposited outside the site?

Vashon-Maury Island Community Council

**Response**

Final design details of the synthetic liner would be included in the Cleanup Action Plan. For consistency with other state regulations, compliance with the minimum functional standards for Solid Waste handling would be used as a model. Under WAC 173-340-710, Applicable Laws – State and Federal Laws, the cleanup action would need to comply with relevant and appropriate requirements under existing laws. The soils on the site are characterized as problem waste under WAC 173-304-100 and under the King County Solid Waste Regulations Title 10. WAC 173-304-460 (3) (c) and the King County Solid Waste Regulations specifies the design of liners. In their review of the DEIS, Ecology recommended that the geosynthetic liner be replaced with either a low-density polyethylene or a high-density polyethylene liner. Thus, it is expected that the final thickness of the liner would be at least 50 mils (0.050 inch).

Burrowing mammals have not been a problem in the use of synthetic liners in western Washington, and would not be expected to be a problem here.

Nevertheless, these technical design issues are beyond the scope of an EIS. It is sufficient to know that containment of contaminated soils is a known and feasible technology. At this point, King County is considering the simple facts that site soils contain arsenic, and that such soils can be managed safely, as has been demonstrated throughout the region for similar cleanup actions (including some within residential areas). Entertaining technical debates as to methods and procedures is premature.

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**Comment O-1.083**

How did Jones & Stokes determine that there are 50,520 cubic yards of arsenic contaminated material above industrial cleanup levels on the site? What is the margin for error in this estimation?

Ortman, David

**Comment O-1.084**

How did Jones & Stokes determine that there are 271,000 cubic yards of arsenic contaminated material above residential cleanup levels?

Ortman, David

**Response**

The Applicant provided these estimates, based on average soil depth and the amount of area to be cleared over the life of the mine

(see Appendix C of the DEIS). This figure is not intended to be exact, but rather to give a rough estimate of the area needed to develop the containment berm.

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**Comment** 2.9.1 What is the basis for the decision to retain all contaminated soils onsite? Many other types of contaminated material would be required to be removed to a permitted, secure disposal facility.  
J. Michael Kuperberg, Ph.D.

**Response** This is the approach proposed by the Applicant.

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**Comment O-1.085** How does Taiheijo Cement Corp. plan on separating the 50,520 cubic yards of arsenic contaminated material above industrial cleanup levels on the site from the remaining estimated 220,480 cubic yards of arsenic contaminated material?  
Ortman, David

**Response** The Cleanup Action Plan would contain the specific protocols and procedures to be used. In general, contaminated soils are within topsoils, which are easily identified. Common construction staking of soils already mapped can be done to delineate the areas with higher concentrations.

---

### ***Containment Berm Vegetation***

**Comment I-7.018** What is the potential for the roots of the top-cover vegetation to breach the containment cell cover?  
Michael Meyer

**Response** The vegetation used for the top of the containment cells would be determined in the Cleanup Action Plan. Appropriate native vegetation that is drought resistant would be selected. Deeper rooted vegetation, such as trees, would need to be removed over time as part of long-term maintenance.

---

**Comment O-1.086** It states that the containment area would be covered with approximately two feet of drain sand and soil and vegetated. What kind of vegetation would be planted? Are the plants proposed for vegetation capable of taking up arsenic through a root system that

would extend through this two foot layer?  
Ortman, David

**Comment O-1.081**

The discussion on Containment Procedures for Contaminated Soils raised a number of questions: It states that the containment berm would be vegetated. What kind of vegetation would be used?  
Ortman, David

**Comment**

2.10.5 What is the criteria to determine if “the cover soil has sufficient nutrients”?  
J. Michael Kuperberg, Ph.D.

**Response**

Specific plants to be used is a design issue and would be defined during the design approval phase of the project, rather than at the SEPA EIS stage. For purposes of the EIS, it is sufficient to know that shallow-rooted, drought-resistant plants would be chosen to prevent damage to the synthetic containment cover. King County prefers the use of native vegetation whenever possible, and such a measure is included as mitigation to be considered by the decision-maker. Plants would not take up arsenic because they would be separated from the contaminated materials by the containment cell material.

Mitigation in the FEIS defines criteria for actual plant growth performance, rather than nutrient levels.

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**Comment**

Section 2.2.5, paragraph 3. As mentioned above no accommodation has been made for monitoring the berm and surrounding soils. No mention of testing protocols or construction oversight has been made.  
Matthew Boyle

**Response**

The containment berm would be stable, and contaminated soils would therefore be contained with the berm. A permanent leachate sampling and monitoring system would be included as part of the Cleanup Action Plan to verify that no leakage and/or groundwater contamination occurred.

---

***Arsenic and On-Site Vegetation***

**Comment**

2.10.3 Are the vegetative materials being removed from the contaminated soils contaminated? What testing has been done to make this determination. Have both above and below-ground

portions of plants been analyzed?  
J. Michael Kuperberg, Ph.D.

**Comment C-8.026**

Soils manufactured onsite require the mulching of existing vegetation. An analysis of this vegetation should be performed to determine the levels of arsenic and other heavy metals present. How will soils from roots be handled—removed and contained or left on the roots? Will douglas fir be sold to logging contractors, and if so, will they be tested for arsenic? What protocols for analysis will be used? Storage and use of wood debris from active stages of the mine should be evaluated for arsenic and other heavy metals. Diagrams should be provided showing where such storage will occur. The containment berm should be shown on Figures 2-1, 2-2A, 2-2B, 2-3, 3-1, and 11-8.

Vashon-Maury Island Community Council

**Comment O-1.360**

10.1 p. 10-1 In addition to the primary issues listed in this section, uptake of arsenic and other heavy metals by plants on site must be addressed. This is important because Taiheijo Cement Corp. is proposing to use composted and/or mulched organic matter (from cleared vegetation) to prepare topsoils. (Sec. 2.2.9.3 p. 2-13). What testing will be done to assure that cleared vegetation high in arsenic will not be used and redistributed on the site?

Ortman, David

**Comment I-17.010**

Will this [woody] debris tested for arsenic contamination first? If it is found to be contaminated what will be used instead?

Joshua Putnam

**Comment O-1.392**

5.4.1.3 p. 5-16 It states that onsite topsoils would be prepared using mulched organic matter (from cleared vegetation). What has been done to evaluate the arsenic level in the organic matter (from cleared vegetation) that is proposed for use on the site?

Ortman, David

**Comment C-8.037**

Clarify what protocols will be used to analyze arsenic levels in vegetation to be mulched.

Vashon-Maury Island Community Council

**Comment**

2.3.4 How does the chipping (or not) of “large wood material” influence the “soil organic content”? What “forest products” does the applicant propose to sell? What are the arsenic contents of these products? How does one define the practicality of moving plants from one area to another? What is the probability that this will happen on a significant scale? Working out the details of such a requirement would be difficult.

J. Michael Kuperberg, Ph.D.

**Response** The Cleanup Action Plan would address the issue of arsenic levels in vegetation, including protocols for any testing of vegetation and mulched materials. Guidance for the testing is contained in Appendix VI of Interim Guidelines for Compost Quality (Ecology 1994).

Specific testing would be conducted in consultation with Ecology, and testing requirements would be established during the design stage of the project. Chapter 10 of the FEIS provides more information regarding protection of environmental health and associated mitigation measures.

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**Comment C-8.026** How will soils from roots be handled—removed and contained or left on the roots?  
Vashon-Maury Island Community Council

**Response** Specific methods would be developed during the final revision and design of the Soils Management Plan. It is likely that most soil would be removed from the roots.

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**Comment C-8.026** Will douglas fir be sold to logging contractors, and if so, will they be tested for arsenic? What protocols for analysis will be used?  
Vashon-Maury Island Community Council

**Comment C-8.026** Storage and use of wood debris from active stages of the mine should be evaluated for arsenic and other heavy metals. Diagrams should be provided showing where such storage will occur.  
Vashon-Maury Island Community Council

**Response** Testing protocols for cleared vegetation would be part of the CAP. Specific methods would be worked out prior to initiating vegetation clearing. Temporary “slash” piles (cleared vegetation) would be established near where clearing takes place.

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**Comment C-8.026** The containment berm should be shown on Figures 2-1, 2-2A, 2-2B, 2-3, 3-1, and 11-8.  
Vashon-Maury Island Community Council

**Response** The Applicant’s proposed approximate location for the containment berm is shown in Figure 2-1 and 10-3 of both the DEIS and the FEIS.

**Comment O-1.108**

It states that woody debris from active mine stages would be placed in reclamation areas to provide wildlife habitat. What testing will be done to assure that woody debris high in arsenic will not be used and redistributed on the site?

Ortman, David

**Response**

Testing methods for cleared vegetation would be specified in the CAP. Should vegetation be found to be sufficiently contaminated, then the operator would be required to dispose of and/or contain the material appropriately. It is unlikely that vegetation contains large concentrations of arsenic. Should high concentrations be found in vegetation, the arsenic would be relatively inert and manageable and vegetation debris would be handled appropriately, in consultation with Ecology.

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## **2.2.6 Trucking and Barging**

**Comment O-1.062**

This section also states that operations would also provide materials for the local market and that this would be delivered via truck, at a rate not to exceed 20 trucks per day. What is the basis for the conclusion that truck deliveries would not exceed 20 trucks per day? How can 20 trucks per day be given as the maximum upper limit when an annual increase of 2.5 percent is assumed in the DEIS?

Ortman, David

**Response**

The FEIS has been revised to state that 20 trucks per day is the maximum number of trucks that would leave the site. The analysis in Chapter 8 of the FEIS is based on a maximum of 20 truck trips per day.

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**Comment O-1.092**

p. 2-11. This section states that on-island trucking and use of material would stay about the same as current conditions, with trucking activity increasing at an assumed rate of 2.5 percent per year. On-island trucking can not stay the same as current conditions if there is an increase of trucking activity of 2.5 percent per year. Please correct this statement.

Ortman, David

**Comment O-1.093**

What documentation is there to support a 2.5% increase in on-island trucking activity?

Ortman, David

**Comment I-2.019**

Once excavated material reaches the dock where it is going? Is it to be barged somewhere? Where?

Rose Clark

**Comment I-17.009**

(repeated) (The DEIS) states that on-island trucking would remain about the same. ... yet it said that the proposal would involve trucking ... water onto the site every day—the study appears to contradict itself here.

Joshua Putnam

**Response**

This estimate was provided by the Applicant based on market expectations. Vashon/Maury Island is growing, as is the rest of King County, so some increase in trucking should be included in the analysis. The exact amount cannot be predicted because it depends on development and related issues such as the economy. The Applicant indicated that an absolute maximum number of truck trips per day would be 20, so this is the level that is addressed in the EIS.

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***Tug Approach and Departure***

NOTE: See additional responses and comments in Chapters 6 and 8.

**Comment O-1.087**

Regarding Barging/Proposed Action/Alternative 1/Alternative 2: What is the estimated time that a 10,000-ton barge would be tied up at the dock? What is the estimated time it takes to load a 10,000-ton barge?

Ortman, David

**Response**

One 10,000-ton barge can be loaded in about 6 hours. At maximum production under the proposed action, barges would be at the dock essentially all the time.

As stated in the DEIS Fact Sheet, barge loading could occur 24 hours per day, 7 days per week. Up to four 10,000-ton barges (or a greater number of smaller barges) would be loaded during each 24-hour period. Under Alternative 1, barge loading could occur for 16 hours per weekday and 9 hours on Saturday. Up to two 10,000-ton barges (or a greater number of smaller barges) would be loaded on each weekday, and one on Saturday. Under Alternative 2, barge loading could occur 12 hours per day, Monday through Saturday. Up to one 10,000-ton barge (or a greater number of smaller barges) would be loaded on each working day.



**Comment C-6.004**

(repeated in 8.3.2). The DEIS does not specify where barges and tugs may operate, their impact on turbidity or shading, and relation to existing eelgrass patches.

Vashon-Maury Island Community Council

**Comment O-1.390**

(repeated in Chapter 10) 10.3.5.1 p. 10-8 This section states that “in many cases, [tugs] would be located on the seaward side of the barge.” How often would tugs be located on the shoreward side of the barge? What would be the impacts from tugs located in this position?

Ortman, David

**Response**

Chapter 6 of the FEIS includes more details regarding tug approach and departure, including additional mitigation measures that would prevent damage to shorelines away from the site. Sections 6.3.4 and 6.4 of the FEIS have been revised to provide further discussion of impacts due to tugboat operation, and additional details of proposed mitigation measures.

---

**Comment**

Example: It might be possible to keep tugs far from the beach, deliver barges to an offshore mooring and winch them to and from the pier with floating lines that do not drag on the sea floor. In order to demonstrate the feasibility of such an operation, permits for installation and operation should be in place. Require as a permit condition that the applicant shut down or convert to such an operation within two weeks of detection of significant marine degradation, and continue in this manner until marine recovery is complete. “Significant” should be carefully defined. Such procedures might sound far fetched or unreasonably demanding, until you compare them with the magnitude of fishery loss we have seen over the years, or the requirement to breach hydroelectric dams in the hope of reversing fishery losses.

Putnam, Keith

**Response**

This approach appears to involve new, untested technology and may not be feasible. This measure has not been included in the FEIS, although many new measures to protect the marine environment have been included.

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***Tug and Barge Characteristics***

**Comment C-4.004**

No characteristics of the barge are given.

Vashon-Maury Island Community Council/Thomas McKey

- Comment C-4.006** If smaller barges are used, the same water depth questions must be answered and marine traffic questions readdressed.  
Vashon-Maury Island Community Council/Thomas McKey
- Comment C-4.007** The DEIS gives no information about the towing and handling vessels to be used. ... single or twin screw; conventional open wheel; props with Kort nozzles, Nautican nozzles, z-drive rotatable? What will be the hull form, drafts, and power of the tugs? What will be the exit velocity of the propulsion wash and its depth? Will it be narrowly focused or diffuse? All of these factors are elements contributing to determination of the prop wash.  
Vashon-Maury Island Community Council/Thomas McKey
- Comment C-4.001** Nothing is said about the size or power of vessels, their drafts, the amount of water necessary for the contemplated operation, the efforts necessary to achieve these depths, and little on the effects on the water or the bottom or the air of the operation or the preparations to operate.  
Vashon-Maury Island Community Council/Thomas McKey
- Comment O-1.091** What are the dimensions of the barges would be proposed to be used?  
Ortman, David
- Response** See FEIS Section 6.3.1 and 6.3.4 for further information about tug and barge characteristics and additional analysis of potential impacts from shading (Section 6.3.1) and prop wash (Section 6.3.4). Suggested mitigation measures are included in Section 6.4.3.
- 

## **2.2.7 Hours of Operation**

- Comment** 2.11.5 Does the distinction between “mining” and “loading” matter to potentially impacted neighbors? Will one operation sound different from the other?  
J. Michael Kuperberg, Ph.D.
- Response** Noise impacts are evaluated in Chapter 7. Noise impact assessment took account of all project-generated noise in a cumulative noise assessment covering all 24 hours of the day.
-

**Comment I-2.009**

Mining day and night daily for three years implies the project will be done with no equipment failures or other nature caused slowdowns.

Rose Clark

**Response**

Shutdowns of various duration would be inevitable, with short-term stops most likely.

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**Comment O-1.094**

Jones & Stokes has failed to provide a clear description of Taiheijo Cement Corp's proposed action regarding hours of operations. It states that the Proposed Action is to have no timing restrictions on barge loading, but that other activities would be restricted to general operating hours. Please provide a specific list of all activities that would be involved in "barge loading"? For example, does this include dozer work? Please provide a specific list of all activities that would be restricted to general operating hours.

Ortman, David

**Response**

Barge loading includes loading of material on to the conveyor, but does not include excavation of material from the ground.

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**Comment I-10.003**

Operation of this site should only be allowed between 8am and 5pm and not on weekends.

Charles Adams

**Response**

Comment noted. The alternatives evaluated include limited hours of operation.

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**Comment C-8.019**

(part a) The reason for loading barges at night is not persuasive.

Vashon-Maury Island Community Council

**Response**

The Applicant wishes maximum flexibility to mine and barge from the site in order to meet the proposed objectives of being able to quickly mine and deliver large amounts of material and, therefore, be very competitive for large customers. King County developed and analyzed Alternatives 1 and 2, which include reduced hours of barging.

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**Comment C-8.019**

(part b) Clarify where the barges will be staged and impacts to eelgrass, sand lance, Pacific herring, lingcod, and rockfish from

such staging.

Vashon-Maury Island Community Council

**Response**

No staging area is defined. No buoys or other permanent staging areas are included in the Proposed Action. The Applicant has indicated that staging would be infrequent, since barges would not be tied up and the required tugs and crews are too expensive to allow frequent waits.

---

**Comment I-17.001**

... barges could be loaded a day before delivery was requested. This would require ... more barges ... but reduce the environmental impact from night operations.

Joshua Putnam

**Response**

Comment noted. Loading the day before would be complicated, since the barge would then need to be kept at the site or held at some other location. This may not be economically practical.

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**Comment O-1.055**

S-2 Description of the Proposed Action Scale of Operation. It states "Mining rates would depend on the number of large sand and gravel contracts for off-island markets." What is the definition of a "large contract"?

Ortman, David

**Response**

A large contract is one that would allow the project to operate at or near full production levels for at least several months.

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**Comment I-6.028**

Will Lone Star be required to stop mining if there is wind?

Alan Gorski

**Response**

Measures to reduce spillage due to wind are considered in Section 6.4 of the FEIS. The measures are intended to reduce spillage due to wind drift.

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## **2.2.8 Employment**

**Comment O-1.095**

Regarding Employment: It states that 5 staff or fewer would operate the site under the No-Action Alternative and that 2 to 20 staff would operate the site under the proposed action and

Alternatives 1 and 2. How could 20 staff be used in Alternative , which is a maximum of one 10,000-ton barge as well as the proposed action, which is a maximum of four 10,000-ton barges? If the statement presented is not an accurate, please change this table. Are these union jobs?  
Ortman, David

**Comment**

2.19.6 Would the Proposed Action employ 3 times more people than Alternative 2? How would the three shifts and numbers of employees work under the Proposed Action?  
J. Michael Kuperberg, Ph.D.

**Response**

This FEIS has been revised to show fewer employees under Alternatives 1 and 2. King County does not know if these are union jobs, nor does it consider this question to be relevant to the environmental impacts.

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**Comment O-1.096**

p. 2-11 Jones & Stokes has failed to provide a clear description of Taiheijo Cement Corp's proposed action regarding employment. Why is impossible for Jones & Stokes to specify the number of people working on any particular aspect of Taiheijo Cement Corp's proposed operations? For example, what is the maximum and minimum number of workers that are involved in barge loading? What is the maximum and minimum number of workers involved in excavation? What is the maximum and minimum number of workers involved in reclamation work? How many of these would be union jobs?  
Ortman, David

**Response**

The exact number of workers is variable. The maximum would be about 20. This is not an absolute limit, but rather an estimate to give the public and the decision-maker an idea about how many people will work at the site. As stated previously, the union status of the jobs is not relevant to the EIS. This information could be requested from the Applicant.

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## **2.2.9 Reclamation**

**Comment O-1.120**

Regarding Reclamation/Proposed Action and Alternatives 1 and 2: It states that active mining/reclamation would be confined to 64 acres of land being mined or actively reclaimed at any one time. What is the definition of "actively reclaimed"? This statement

seems to imply that only 64 acres of land will be impacted at any one time. Is it correct that reclamation of mined areas would take decades and that “active reclamation” is actually an ongoing process that might include replanting and other reclamation over a long time period? Please change this statement to read: “While up to 64 acres of land will be subject to mining or immediate reclamation activities, mined out areas would be subject to an ongoing decades long reclamation process.”

Ortman, David

**Response**

In response to this comment, Chapter 5 has been revised to assess the changes in habitat during reclamation (Section 5.3.3 of the FEIS). In addition, Section 2.2.9 includes a new statement that reclamation involves gradual development of vegetation.

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**Comment C-8.025**

How will the applicant address slope stability after mining? Discuss the potential for seismic activity at the site, historic seismic activity in the area, and potential impacts to surrounding properties and slopes within the mining site from a slide.

Vashon-Maury Island Community Council

**Comment**

Figure 2.2 Will the 50 foot buffer be protected from sloughing? What if sloughing/erosion takes place and reduces the width of the buffer? Would a reduced buffer perform the same task?

J. Michael Kuperberg, Ph.D.

**Response**

See Chapter 4 of the FEIS, as well as responses to comments on Chapter 4. Slope stability is a design issue to be addressed as part of reclamation. At this point, it is sufficient to know that slope control is technically and economically feasible and, in fact, is required under the state Surface Mining Act. KCC Section 16.82.100 specifies several operation conditions and standards of performance that address concerns regarding slope stability. The King County Code can be found on the King County World Wide Web Site.

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**Comment C-12.003**

Reclamation---only once did I catch a specific point that the company “may” use native species in some instances ... reclamation efforts are even more vital than any initial impact or mitigation.

St. George, Brian

**Comment I-1.002**

The applicant makes no commitment to establish such communities, nor even to establish native plants ... reclamation “may include the use of native plants”.

Frank Shipley

**Comment O-1.107**

2.2.9.4 p. 2-14 It states that mined out areas would be revegetated with various shrubs and trees. Would these be native or non-native species?

Ortman, David

**Comment**

The need for non-native plants to prevent erosion begs the question of how native plants became established in the first place.

J. Michael Kuperberg, Ph.D.

**Comment**

2.14.2 The vague generalities presented here do not allow for evaluation of the proposed restoration plan. For example, will the use of native plants be a requirement? If seeding must be complete by September, what will happen between October and spring?

J. Michael Kuperberg, Ph.D.

**Response**

The Applicant is not proposing to use native vegetation, but King County may condition the project to use native vegetation based on adverse impacts to madrone and wildlife habitat, and based on King County Policy NE-503, which states:

*The use of native plants should be encouraged in landscape requirements, erosion control projects, and in the restoration of stream banks, lakes, shorelines, and wetlands.*

Section 5.4.3 of the FEIS outlines mitigation measures that emphasize revegetation with native plant species. Sometimes, however, non-native plants can establish more rapidly than native plants and, where very rapid establishment is necessary to control erosion, these nonnative plants can be more effective at controlling erosion.

The seasonal timing of planting and seeding is a design-level detail that need not be defined in the FEIS. For the EIS, the project needs to be defined only to the level of detail necessary to identify significant impacts and measures that could be developed to adequately mitigate those impacts. At this stage, the project is only a proposal, and in some cases it is perfectly acceptable to identify, for example, “general restrictions that could be further defined prior to implementation.” For example, an FEIS could require revegetation with “native plants,” but does not have to list the specific species and identify the precise location where each plant would be planted.

**Comment C-12.006**

Stumps serve no habitat function. If the site is currently forested, the buffers will serve no habitat function and are meaningless to interior forest wildlife. Lonestar has not set a clear bar to measure when an area has been reclaimed sufficiently to clear the next 32 acre parcel.

St. George, Brian

**Response**

Reclamation standards were included as mitigation measures in the DEIS and more specific standards are included in the FEIS. Measures to protect site buffers are included in Chapter 5 of the FEIS.

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**Comment G-1.010**

(part 1 of 2) Reclamation. We were not able to understand fully the relationship, if any, between reclamation plans and measures to avoid transfer of soil contamination during mining operations. Is there such a relationship? The reclamation plan, if we understand it correctly, allows too much of the mined area to be exposed at any one time. The sooner an area is reclaimed, the better, particularly given the risk that mining may not proceed as rapidly as projected, or be terminated indefinitely without restrictions. We see no reason why the proponent should not be required to work in smaller areas—say, a few acres in extent—and to clean up and reclaim when the work is done in that segment. The plan appears to allow very large areas to remain exposed and unreclaimed.

Seattle Council on Airport Affairs

**Response**

The primary concern with reclamation and containment of contaminated soils is that onsite soils cannot be used for restoration. Still, many native plants associated with the shorelines of Puget Sound are adapted to colonizing mineral soils. Madrone may, in fact, require such soils to become established. Based on natural revegetation that can be readily observed on bare sand at the site, it is clear that vegetation could be reestablished with little or no soil augmentation, and, therefore, the containment of top soils would not preclude vegetative restoration.

The Applicant would be required to limit active mining areas to 32 acres. Areas outside of this would require interim or permanent restoration. Section 5.4 of the FEIS includes additional mitigation measures to phase mining and reclamation so as to reduce the rate of madrone loss.

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**Comment G-1.010**

(part 2 of 2) There remains the risk pointed out in our scoping comments and in other communications to the Department that this applicant may vanish like a puff of smoke whenever its foreign owners want to evade their responsibilities. A simple bankruptcy application, and reclamation will no longer be the responsibility of the nominal owners (assuming that the true ownership is known—another issue that we have raised with the Department without response). Or, the owners can simply abandon the operation, and allow the property to revert to the county itself for unpaid taxes, neatly shifting the reclamation burden to the taxpayers—which our state statute was intended to prevent. A stricter schedule of reclamation would help to lessen these risks.

Seattle Council on Airport Affairs

**Response**

The Applicant could be required to post financial guarantees per KCC 16.82.170. Such financial guarantees are typical for projects of this magnitude.

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**Comment G-1.009**

9. DNR standards. While mention is made of Department of Natural Resources standards for site reclamation, they are not provided in an Appendix nor described in the text in sufficient detail to permit a reviewer to form an opinion as their efficacy in this case. Reproduction of the standards in an Appendix would seem desirable if not essential. Readers should not be required to research these standards on their own.

Seattle Council on Airport Affairs

**Response**

WAC 197-11 (SEPA Rules) emphasizes that an EIS should not contain overly detailed or technical information that can be incorporated by reference. For example, under WAC 197-11-400:

*The purpose of an EIS is best served by short documents containing summaries of, or reference to, technical information.*

WDNR standards are therefore stated in the EIS only in general terms. The standards are defined in Chapter 78.44 of the RCW, Surface Mining. The RCW is available at most libraries and is also available at the Washington State Legislature web page at <http://www.leg.wa.gov/wsladm>.

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**Comment G-3.008**

8. Section 2 2 9. “Restoration plans” that are “still conceptual” are impossible for the public to review. While this may be “fairly standard procedure,” the fact that Jones & Stokes was recently

reprimanded by King County for an inadequate EIS (the Olympic Pipeline Company cross-cascades pipeline proposal), would argue that “fairly standard procedure” is not adequate in this case, and that a restoration plan should be prepared for public review prior to issuance of any permit. This point is driven home by the fact that Figure 2-3, which shows Douglas fir seedlings as proposed reclamation for the entire site, is not consistent with Section 5.4.2.2, which discusses madrone reforestation. In addition, Section 5.4.11, Revegetation, states that a reclamation plan has been submitted to the Department of Natural Resources (DNR). What exactly is the plan, and why was it not included as an appendix?

People for Puget Sound

**Comment**

Fig. 2.3 This figure does not mention the madrone or “native understory” specified elsewhere. Again, the details and verification plan for restoration will be critical to the final outcome.

J. Michael Kuperberg, Ph.D.

**Comment**

Page i states that hydroseeding would be used as a “temporary erosion control” measure. However hydroseeding is listed here as a mechanism to be used for “permanently stabilizing reclaimed areas”. What is the basis for this apparent discrepancy.

J. Michael Kuperberg, Ph.D.

**Response**

The Applicant proposes to plant Douglas-fir and to hydroseed slopes. The EIS Team identified this as an adverse impact, since this would substantially change the natural madrone community that grows at the site. Therefore, Section 5.4.3 defines how the project could be conditioned to restore madrone forest. The EIS evaluates impacts, defines specific adverse impacts, and then identifies measures that could feasibly attain or approximate objectives of the proposal, but at a lower environmental cost.

The FEIS includes more information about reclamation. Specific plans would be developed at the design stage. For SEPA, only the technical and economic feasibility of mitigation, and the intended environmental benefit, need be discussed (WAC 197.11.055).

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**Comment I-1.003**

... no site restoration goals or endpoints proposed in the document, and in the public meeting the applicant stated that a housing subdivision would just as well serve as a restoration endpoint as any other land use.

Frank Shipley

**Response** The EIS assumes that the site would remain undeveloped. Subsequent land use is a future decision, and this project would not preclude subsequent uses of the site. Housing would be one potential use.

---

**Comment I-9.004** Grading permit should not be issued until a reclamation plan has been developed, reviewed and approved by the public and local, state and federal agencies. ... reclamation plan must include sufficient financial assurances.  
Cyndy Mackey

**Response** Such a plan would be required by the WDNR. The FEIS includes specific measures to avoid losses of madrone forest and other native vegetation.

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**Comment O-1.099** This section [2.2.9] quotes RCW 78.44 on “rehabilitation for the appropriate future use of disturbed areas”. What is meant by “appropriate future use of disturbed areas”?  
Ortman, David

**Comment** The final disposition of the site should be agreed upon and documented as part of this agreement. The mining operation and contaminated soil disposal should restrict the future uses of the site. This decision should be an integral part of the process.  
J. Michael Kuperberg, Ph.D.

**Response** Appropriate use is that which is allowed under current zoning. Currently, mining is the identified appropriate use of the site. Subsequent to mining, the site could be converted to residential development or some other land use, but analysis of such development is outside the scope of the current decision and EIS.

Any future land use decisions would, naturally, have to take into account the presence of the containment berm.

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**Comment O-1.100** This section states that in some cases, non-native grasses and other plants would need to be planted. Please provide a list of all non-native grasses and plants that Taiheijo Cement Corp. proposes to plant on this site.  
Ortman, David

**Response**

Such a list has not been prepared, nor is it necessary to evaluate potential significant adverse impacts. King County would consider requiring use of native vegetation as much as possible, as outlined in Section 5.4.

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**Comment O-1.101**

Jones & Stokes has failed to provide a clear description of Taiheijo Cement Corp's obligations under its existing Surface Mining Reclamation Permit. Please describe all steps taken by Taiheijo Cement Corp. regarding reclamation of the existing site.  
Ortman, David

**Response**

Previous owners have conducted most mining at the site. Little reclamation has been completed. Madrone forest has naturally recolonized several locations.

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**Comment O-1.102**

2.2.9.1. p. 2-13 Jones & Stokes has failed to provide a clear description of Taiheijo Cement Corp's proposed action regarding pre-mining site preparation. This section states that vegetation would first be cleared and then soils would be scraped using an excavator or grader. The contaminated soils would be collected and placed within the containment cell located at the northern portion of the property. What would happen to the vegetation that is be cleared? It is likely that some of this vegetation may have a high arsenic content. How will this be handled?  
Ortman, David

**Response**

Vegetation would be tested, but it is not expected that it would contain concentrations of arsenic above relevant action levels. If it did, then the Applicant would be required to dispose of the material according to standards specified in the Model Toxics Control Act, or as otherwise directed by the Department of Ecology.

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**Comment O-1.103**

This section states that onsite topsoils would be prepared using composted and/or mulched organic matter (from cleared vegetation). What testing will be done to assure that cleared vegetation high in arsenic will not be used and redistributed on the site?  
Ortman, David

**Response** Contaminated soils would be completely contained on site, so these soils would not be used for restoration. As discussed elsewhere, much of the vegetation at the site is adapted to mineral soils and is expected to be able to recolonize areas with little or no use of topsoil amendments.

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**Comment O-1.104** pp. 2-13/2-14 It states that reclamation performance would be monitored by the DNR. How often would reclamation performance be monitored by DNR?  
Ortman, David

**Response** King County cannot speak for the WDNR. King County would evaluate reclamation success at least every 5 years, as part of the required periodic review of the project.

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**Comment O-1.105** How many mine reclamation inspectors does DNR have?  
Ortman, David

**Response** This question should be directed to the WDNR.

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**Comment O-1.106** What type of hydro seeds would be used on reclaimed slopes? Would these be native or non-native species?  
Ortman, David

**Response** The Applicant did not specify what type of seed would be used. The EIS team identified the use of native plants as a potential mitigation measure to reduce the impact of nonnative species (Section 5.4).

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**Comment** 2.13.5 Do outside experts agree with the proposed contouring and topsoil plan?  
J. Michael Kuperberg, Ph.D.

**Response** The proposed conceptual contouring plan was developed by the Applicant's consultant. The final reclamation plan would be subject to independent review and approval by WDNR and King County.

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**Comment**

Fig. 2.2B The legend states that “Generally, slopes will vary”. Does the applicant have experience with this type of mining and restoration. It was assumed that the homogeneous nature of site soils would make it easy to specify exact final slopes, benches, berms and grades. Where is the outlet for the Emergency Overflow”? Since the site is only designed to contain a 25-year flood, the Emergency Overflow will almost certainly be used.

Joel Kuperberg

**Comment**

Section 2.2.9.3, Final Contouring. Where is the material testing and geotechnical report that supports slopes steeper than 2:1, when the excavation has already approached to within 15 feet of the aquifer? The final angle-of-repose will likely undermine or slump the site buffer, regardless of vegetative cover. Where would the “Additional soils” be obtained for reclamation? What organic materials are going to remain on a 2:1 slope?

Matthew Boyle

**Response**

The exact specifications of slopes and contours and the locations of benches, berms, and grades are design issues that would be addressed in the final mining and reclamation plans. For purposes of evaluating likely adverse environmental impacts, it is sufficient to state that contouring and slope stabilization of mined gravel slopes are technically feasible and have been achieved successfully on other projects.

The final design and specifications for the final site grading and restoration would be included in a restoration plan, which would be subject to review and approval by the WDNR and King County.

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## **2.3 Alternative 1 – Reduced Barging Hours, Scenario 1**

**Comment G-2.008**

8.2.3. It is stated that if Alternative 1 – Reduced Barging Hours, Scenario 1 was to take place the operation may be affected in two ways. “First, the applicant may receive fewer contracts (or may receive contracts for less material), since the maximum daily production rate may be too low to meet the required delivery schedules of certain contracts.” Again, no factual information has been provided as to the nature of the contracts available to the applicant.

Washington Environmental Council

**Response**

The conclusion that the Applicant may receive fewer contracts is based on the basic premise that the more the mine can produce, the more contracts the operator may obtain. Some clients may have rapid timing needs, so that a mine that could deliver product fast would be more likely to receive a contract than would a mine that could not.

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## **2.4 Alternative 2 – Reduced Barging Hours, Scenario 2**

**Comment**

S4.5 It appears that Alternative 2 represents 43% of the operating time proposed in the Proposed Action, however, only 25% of the number of barges could be loaded. What is the basis for this apparent discrepancy?

J. Michael Kuperberg, Ph.D.

**Response**

The restriction to 7.5 million tons (5.5 million cubic yards) per year precludes the ability to load barges constantly whenever allowed. If barges were being loaded all the time, then the 7.5 million ton (5.5 million cubic yard) annual limit would be met in about 190 days.

Barging being allowed 24 hours, 7 days a week does not mean that barges would always be at the site. Instead, the operator would have the option to load a barge at any time. For example, a person can legally drive their car at any hour, but this does not mean that a person would drive 24 hours a day.

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## **2.5 No-Action Alternative**

### **2.5.1 No-Action Alternatives under SEPA**

**Comment O-1.123**

Jones & Stokes has failed to present a proper evaluation of the no-action alternative. WAC 197-11-440(5) Alternatives including the proposed action. (b)(vii) “Discuss the benefits and disadvantages of reserving for some future time the implementation of the proposal, as compared with possible approval at this time. The agency perspective should be that each generation is, in effect, a trustee of the environment for succeeding generations. Particular attention should be given to the possibility of foreclosing future

options by implementing the proposal.” Rather than taking seriously that the agency perspective should be a “trustee of the environment for succeeding generations”, Jones & Stokes has taken the applicants perspective that dismantling a Puget Sound island is in their best corporate interest.

Ortman, David

**Comment**

2.12.3 The final disposition of the site should be agreed upon and documented as part of this agreement. The mining operation and contaminated soil disposal should restrict the future uses of the site. This decision should be an integral part of the process.

J. Michael Kuperberg, Ph.D.

**Comment**

How did KC-DDES arrive at the conclusion that since no direction is given in the SEPA Act, the “no action alternative” would be business as usual for Lonestar? To most of us, “No Action” means just that. Please allow us to follow the DDES reasoning process.

Joe Kuperberg

**Response**

The EIS evaluates and discloses the impacts of the proposal and identifies ways to feasibly attain the proposal’s objectives, but at a lower environmental cost.

Nevertheless, King County’s authority to condition or deny a private proposal is not unlimited, but rather must comply with allowable substantive authority under SEPA (WAC 197-11-660). The opinion that the EIS “has taken the Applicant’s perspective” is noted, but changes to the EIS or the No-Action Alternative are not warranted, based on the limits of substantive authority under SEPA, and on the definition of “No-Action Alternative” under SEPA.

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**Comment O-1.124**

p. 2-21 Once again, Jones & Stokes is providing misleading information. It states in this section that “Under this development alternative, only local markets on the island would be served. At this rate of extraction, the mine would remain in operation indefinitely.” Isn’t this statement directly contradicted by the statement on p. 2-3 that “At some point, the increase in extraction for the local market would slow and eventually halt, since demand for sand and gravel within the confines of Vashon/Maury Island is limited.” How can Jones & Stokes first state that extraction for the local market would slow and eventually halt, and then state that with only local markets on the island to be served the mine would



remain in operation indefinitely?  
Ortman, David

**Response**

*Increases* in demand would eventually stop, but demand would continue indefinitely.

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**Comment C-8.006**

King County determined that to predict a level of operation that may result from denying the proposal would confuse the issues ... why should maintaining current production levels be confusing, if no action means status quo? Does the county have other options in mind not spelled out to the public? Why not an option denying the applicant continued mining on the site? Why is use of the site for open space not included?

Vashon-Maury Island Community Council

**Response**

The No-Action Alternative does evaluate current production levels. Denying all mining is not a reasonable alternative since the Applicant presently possesses a valid grading permit. SEPA does allow for a project, in this case increased mining activity, to be denied if the project would result in significant adverse impacts that cannot be mitigated. The site is privately owned, and King County does not have the option to designate the site as open space

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**Comment O-1.117**

Why would Jones & Stokes, in this once instance, discuss the difficulty of predicting the exact progression of mining over thousands of years under the “no-action alternative” when it has already alleged that at some point, the increase in extraction for the local market would slow and eventually halt, since demand for sand and gravel within the confines of Vashon/Maury Island is limited?

Ortman, David

**Response**

The No-Action Alternative considers the level of mining that has occurred over the past several years. The discussion in the EIS was intended to describe how the No-Action Alternative was developed. As mentioned earlier, the EIS states that the growth in demand from on-island markets would eventually halt, but that the demand would continue.

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**Comment O-1.122**

p. 2-5 No-Action Alternative. This section states, “It is important to note that should King County decide to not approve the

applicants proposal, something other than the No-Action Alternative evaluated here may result, particularly in light of the current and expected high demand for gravel in the Puget Sound region.” Please explain the above statement. What does the “current and expected high demand for gravel in the Puget Sound region” have to do with this site when there appears to be relatively little gravel on this site?

Ortman, David

**Comment C-8.004**

The DEIS states that should King County decide not to approve the applicant’s proposal, something other than the no-action alternative may result, particularly in light of current and expected high demand for gravel ... what other options might result? How is the outcome dependent upon high demand for gravel, if production is limited to on-island use? The site is generally considered a source of fill, so please discuss the demand for sand and gravel, and each separately. If a decision is made to accept the no action alternative but the result will be something else, then there is not a no action alternative presented in the EIS.

Vashon-Maury Island Community Council

**Response**

“Sand” should have been included in the sentence referenced. Still, the EIS does not make a major distinction between sand and gravel, nor is such a distinction relevant to the environmental impacts of the proposal. The distinction is obviously important to customers and markets, but the market is assumed to be present, based on the Applicant’s desire to reopen the site. If such markets turn out to be lower than anticipated by the Applicant, then mining and associated impacts would also be lower. The EIS considers the highest level of mining that is proposed, since this is when impacts would be the greatest.

The paragraph describing how something other than the No-Action Alternative may result from King County denying the proposal has been removed from the FEIS to eliminate potential misunderstanding.

---

**Comment C-8.005**

The DEIS suggests it would be speculative to predict what would result following legal challenges or negotiations ... this seems to indicate that if none of the other alternatives are permitted (limiting production to current levels), it would be successfully challenged by the applicant in court, or the county might negotiate a deal and circumvent the EIS process. Please state what discussions have occurred between King County and the applicant regarding legal actions, settlements, negotiations. Why was the

issue of a lawsuit presented in the EIS? What other EISs have provided such a threat.

Vashon-Maury Island Community Council

**Comment O-1.128**

This section contains something never found or required in a DEIS, legal threats by the applicant, Taiheijo Cement Corp. What does Jones & Stokes mean: “it would be highly speculative to predict exactly what would result following possible legal challenges or other forms of negotiations” from denying the proposed project?

Ortman, David

**Response**

This statement is an attempt to lay out the legal environment surrounding this EIS. The reason for this language in the EIS is to explain to the public that the No-Action Alternative is, by its very nature, theoretical and speculative, and not a known fact.

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**Comment O-1.129**

What does Jones & Stokes mean in this section when it states: “should King County decide to not approve the applicant’s proposal” and further on state that “King County determined that to attempt to predict a level of operation that may result from denying the current proposal would confuse the issues ...”? How does predicting a level of operation from denying the current proposal confuse the issues and how is this different from an evaluation of continuation of current mining levels and practices?

Ortman, David

**Response**

This paragraph was intended to describe the situation as realistically as possible so that the public, agencies, and others could understand the basis of the No-Action Alternative, and the possibility that something else may happen if King County were to deny the proposal. This paragraph was not essential to comply with SEPA and, therefore, has been deleted from the FEIS to avoid misunderstanding.

---

**Comment O-1.125**

What does Jones & Stokes mean by “something other than the No-Action Alternative evaluated here may result”?

Ortman, David

**Response**

The No-Action Alternative includes what would reasonably be expected to occur should King County decide not to grant the permit. King County cannot predict with certainty what would

happen. The statement referred to here was intended to inform the readers that it is possible that something else could occur.

---

**Comment O-1.126**

Jones & Stokes states that under the No-Action alternative, the same impacts would occur just “over a much longer period”. Based on an existing average of 15,000 tons per year, is it correct that it would take 3,000 years to approximate the amount of removal that the applicant could undertake in 11 years under the proposed project? How can Jones & Stokes possibly conclude that the impacts over 11 years as opposed to 3,000 years would be similar?

Ortman, David

**Response**

In response to this comment, the description of the No-Action Alternative has been revised to include small-scale mining occurring indefinitely. The impacts have been revised accordingly.

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**Comment O-1.127**

Jones & Stokes states that the applicant could undertake all the same activity under its current permit except barging. This does not appear to be the case. For example, arsenic contamination would still be a concern and an NPDES permit would likely still be required. Please amend this section to clarify that the applicant is not authorized to expand its mining operation if the proposed grading permit revision is denied.

Ortman, David

**Response**

The method for addressing contaminated soils would be defined by Ecology and King County, as stated in Section 2.5.3 of the EIS.

---

**Comment O-1.132**

This section states that “The applicant’s existing mining and barging rights are not necessarily limited to the No-Action Alternative.” Please delete the reference to “mining and barging rights”. Mining and barging are conducted under permits and leases subject to conditions and mitigation. There are no “mining and barging rights”.

Ortman, David

**Response**

The section referenced has been removed from the FEIS to avoid confusion. The intended message is that the Applicant, King County, and, most likely, the Vashon/Maury Island Community

Council all have different thoughts regarding just what level of mining could be allowed under the existing permit.

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**Comment G-1.011**

11. A word of thanks is in order here for the preparation of Table 2-1, in Chapter 2, which we found most helpful. We are sure that many other commenters were also helped by this table.  
Seattle Council on Airport Affairs

**Response**

Comment noted.

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**Comment O-1.135**

Regarding Barging/No-Action Alternative: Please explain why no barging is listed in this summary when on p. S-5 it states, ... “this is not to say that barge loading would be prohibited if the applicant’s proposal is denied.” If the statement presented is not accurate, please change this table.  
Ortman, David

**Response**

The No-Action Alternative evaluated in the EIS assumes no barging. The reference to barging under the No-Action Alternative has been removed.

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## **2.5.2 Facilities and Operation**

**Comment I-17.019**

... “no action” alternative, ... stated as 10,000 or 15,000 tons per year, is ... stated as 20,000 tons per year (Page 3-8) ... study should be consistent.  
Joshua Putnam

**Comment**

Pg-S1.3 In a document of this size, it is necessary to carefully maintain consistency among the various values and assumptions. On page ii of the document, the “current low levels” of mining are quoted as being “approximately 20,000 tons per year maximum”. On this page, the “level of production that has occurred in the recent years” is quoted as “roughly 10,000 tones of sand and gravel per year”. On page S.3 of the document, the “amount of sand and gravel extracted for the local market was estimated to average approximately 15,000 tons in 1998”. In comparison to the proposed value of 5.72 million tons per year, the difference between 10,000, 15,000 and 20,000 tons annually is small. However, this two-fold discrepancy raises questions regarding the

consistency of the numerous values quoted subsequently in the document. The authors should review the document carefully to identify and resolve this and other inconsistencies.

J. Michael Kuperberg, Ph.D.

**Response**

The No-Action Alternative assumes an average production rate of 15,000 tons (11,000 cubic yards) per year, with a range from 10,000 to 20,000 tons (7,333 to 14,667 cubic yards) per year. The analysis in Chapter 3 used the higher level to evaluate impacts of the No-Action Alternative. The actual differences among these amounts are minimal when compared to the levels of mining the Applicant is proposing. It is important to know that much smaller amounts would be mined, and that the mine would remain very similar to how it looks now for several years.

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**Comment 8.003**

Please restate the No-Action alternative so that it either is or is not the current level of operation.

Vashon-Maury Island Community Council

**Response**

The No-Action Alternative is not the current level, since the site is currently not in operation, but rather a general average of how mining has occurred to serve local markets over the past 20 years.

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**Comment C-8.008**

When is it anticipated that the increase in extraction for the local market would halt? Provide a total number of cubic yards and tons estimated to be removed before the local market would slow and eventually halt, and a timeline. "Much longer period" means about 4,000 years as opposed to 11 years. Please accurately reflect the number of years.

Vashon-Maury Island Community Council

**Comment I-7.020**

... the EIS makes the no-action alternative sound not much different than the proposed action ... . Has the EIS consultant been directed to portray the applicant's proposal in the most favorable light? ... The verbiage used in the EIS is not objective.

Michael Meyer

**Response**

Mining could occur indefinitely under No-Action, since the site contains a much larger amount of material than could possibly be mined at 20,000 tons (14,667 cubic yards) a year or that could possibly be used on the island. Based on this impossibility of mining the site to its fullest extent under the No-Action

Alternative, the FEIS has been revised to eliminate consideration of the entire site being mined under the No-Action Alternative.

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**Comment C-8.028**

Is the screening plant still onsite with the mine idle for two years? Provide diagrams and specifications for the conveyor system and correctly characterize the conveyor system. Accurately reflect the condition of the dock, and reflect that the level of operation at the site has been at or about 10,000 cubic yards per year for 20 years and no barge loading has occurred since 1978.

Vashon-Maury Island Community Council

**Response**

The screening plant is not present on the site and the EIS has been revised to not mention it. Diagrams and specifications of the conveyor are not necessary to understand the impacts of the proposal and have not been included, although the basic dimensions are noted. King County commissioned an independent study of the condition of the dock in response to numerous public and agency comments, and the report is incorporated into the FEIS as Appendix F. Section 1.4 of the FEIS has been revised to note that barging has not taken place on the site for over 20 years.

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**Comment O-1.114**

Regarding Stormwater Management/No-Action Alternative: Why is no stormwater pond proposed under the No-Action alternative?

Ortman, David

**Response**

Because the site is currently not generating sufficient stormwater to require a pond.

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**Comment O-1.115**

Figure 2-2A. On page 2-27 it states that a new stormwater pond would be constructed. If this is the case why does Figure 2-2A fail to identify any stormwater pond and instead appears to identify two “proposed retention/infiltration” ponds?

Ortman, David

**Response**

Figure 2-2A is conceptual, and not a design. Two adjacent ponds are often used, as illustrated in the figure. What is important to know is that, as proposed, water would be directed to a central point at the base of the mine. Whether one, two, or even three ponds are located at this point is inconsequential to the analysis and the decision to be made.

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**Comment O-1.071**

Regarding Structures: Is it correct that under the no-action alternative, no repairs to the dock structure would be undertaken? How does this square with the statement on S-5 that states “this is not to say that barge loading would be prohibited if the applicant’s proposal is denied.” If the statement presented is not accurate, please change this table.

Ortman, David

**Response**

The No-Action Alternative assumes neither barging nor repairs to the dock would take place. References to barging under the No-Action Alternative have been removed from the text of the FEIS.

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### **2.5.3 Containment Procedures for Contaminated Soils**

No substantive comments were received that specifically address this section.

### **2.5.4 Trucking and Barging**

**Comment O-1.088**

Regarding Access and Roads: Please explain why under the No-Action Alternative, which is to continue on-island deliveries, existing roads would be used, but under the Proposed Action and Alternatives 1 and 2, additional roads would be constructed for what appears to be the same on-island deliveries?

Ortman, David

**Response**

Under the No-Action Alternative, the site would change little. Under the three “Action” alternatives, site topography would change rapidly so that new haul roads would need to be developed onsite as the site is mined.

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### **2.5.5 Reclamation**

**Comment O-1.119**

Regarding Reclamation/No-Action Alternative: It states that low levels of mining would require reclamation. Please provide a detailed explanation of the reclamation requirements under the current DNR permit and what has been done to comply with these requirements.

Ortman, David



**Comment O-1.121**

p. 2-22 It states that under the No-Action alternative natural revegetation is likely to occur at a faster rate than planned revegetation because of the low rate of extraction. Please provide a summary of the reclamation requirements under the 1971 Surface Mining Reclamation Permit and the reclamation requirements under the 1993 amendments to the Surface Mining Act that pertain to this site.

Ortman, David

**Comment**

3.1 p.2 This section states that the existing pit covers an area of 40 acres of disturbed area, of which 9 acres are currently being mined and that no formal reclamation process appears to have been performed. Please explain what reclamation requirements were in the DNR Reclamation Permit for this site and why no reclamation has taken place.

Ortman, David

**Response**

The history of reclamation is not known, but madrone has colonized portions of previously mined areas, while Scot's broom and other invasive species have developed on other portions. Most areas that have been mined are not at final grade, so any reclamation would be interim, rather than permanent. In general, interim reclamation is related to slope stabilization and erosion control, rather than creation of native plant habitats. To King County's knowledge, the WDNR has stated no detailed requirements for the site.

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**Comment I-7.001**

"Mining would continue indefinitely. Site reclamation would occur to meet DNR requirements, but at a ... slower pace than the Proposed Action" ... this is misleading, making it sound like the no-action alternative would lead to mining at the site in perpetuity, and that reclamation would be slothful.

Michael Meyer

**Response**

We could not find this wording in the EIS. Reclamation would be different under the No-Action Alternative, as described in Section 2.5.5 of the EIS (both Draft and Final).

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## **2.6 Citations**

Ecology. See "Washington State Department of Ecology".

Washington State Department of Ecology. 1994. Interim guidelines for compost quality. Olympia, WA.

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